

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 21, line 15, with the following rewritten paragraph:

Fig. 13 depicts a detailed configuration of a moving portion and encoder slit plates of the angle detecting apparatus according to the second embodiment of the present invention. Fig. 14 depicts a positional relationship between the moving portion 3 and the encoder slit plates 4A, 4B of the angle detecting apparatus according to the second embodiment of the present invention. In Figs. 13 and 14, slits 4e extend in a direction orthogonal to the longitudinal direction of the moving portion 3 and are arranged at equidistant intervals δ in the longitudinal direction of the moving portion 3.

Please replace the paragraph beginning at page 22, line 6, with the following rewritten paragraph:

This displacement $\Delta L\theta x$ is output to the angle-calculation processing unit 19. The angle-calculation processing unit 19 calculates the relative angle θ of the moving portion 3 to the reference position of the moving portion 3 using

$$\theta = \cos^{-1}(L\theta x/L) \quad (6)$$

where L is a distance between the two-phase sensors ~~SR, SL~~ SR2, SL2.